

What is claimed is:

1. A film autoloader for separating one photographic film from a plurality of photographic films and supplying the photographic film to an image reading apparatus for reading image recorded on the photographic film, comprising:

a film loading section for loading therewith a spliced film in which the plurality of photographic films are connected in a longitudinal direction thereof;

a film feeding portion for feeding, from the film loading section, a head portion of the spliced film loaded with the film loading section;

a joint detecting section for detecting a film joint portion between a first photographic film and a second photographic film in the spliced film fed from the film loading section, the second photographic film being fed next to the first photographic film;

a film separating section for separating the first photographic film from the spliced film on the basis of information from the joint detecting section; and

a film transporting portion for transporting the first photographic film separated from the spliced film by the film separating section to a reading transport path provided at the image reading apparatus.

2. A film autoloader according to claim 1, wherein, with the film loading section, the spliced film that is taken up in roll

form in advance is loaded.

3. A film autoloader according to claim 1, further comprising:

a loop forming section, which is provided at a downstream side with respect to the film separating section along a transporting direction of the photographic film by the film transporting portion, and by which the photographic film transported by the film transporting portion is bent along a substantially thickness direction thereof so as to form a loop-shaped portion therein when another photographic film is on the reading transport path.

4. A film autoloader according to claim 1, wherein the film separating section separates the first photographic film from the spliced film by cutting a position vicinity of the film joint portion in the spliced film.

5. An image reading apparatus comprising:

a film autoloader for separating one photographic film from a plurality of photographic films and supplying the photographic film to an image reading apparatus for reading image recorded on the photographic film, comprising:

a film loading section for loading therewith a spliced film in which the plurality of photographic films are connected in a longitudinal direction thereof;

a film feeding portion for feeding, from the film loading section, a head portion of the spliced film loaded with

the film loading section;

a joint detecting section for detecting a film joint portion between a first photographic film and a second photographic film in the spliced film fed from the film loading section, the second photographic film being fed next to the first photographic film;

a film separating section for separating the first photographic film from the spliced film on the basis of information from the joint detecting section; and

a film transporting portion for transporting the first photographic film separated from the sliced film by the film separating section to a reading transport path provided at the image reading apparatus;

a reading transporting portion for transporting the photographic film supplied to the reading transport path by the film autoloader;

an image reading section for reading, at a predetermined reading position, the image of the photographic film that is transported along the reading transport path by the reading transporting portion;

a film accepting section for accepting the photographic film that is subjected to an image reading by the image reading section;

a transport merging portion provided between the film transporting portion and the reading transport path;

a film output path, which is connected to the reading transport path via the transport merging portion, for guiding the photographic film from the transport merging portion to the film accepting section;

a film output portion for outputting, to the film accepting section, the photographic film that is transported into the film output path; and

a transport switching section, which is provided in the transport merging portion, for switching between a state in which the photographic film transported by the film transporting portion is guided to the reading transport path, and a state in which the photographic film transported from the reading transport path to the transport merging portion by the reading transporting portion is guided to the film output path.

6. An image reading apparatus according to claim 5, wherein the image reading section performs a prescanning for preliminary reading the image on the photographic film when the photographic film is transported from one end of the reading transport path, which is located at a side of the transport merging portion, to another end of the reading transport path, and the image reading section performs a fine scanning for finely reading the image on the photographic film on the basis of image information obtained by the prescanning when the photographic film is transported from the other end of the reading transport path to the one end of the reading transport path.

7. An image reading apparatus comprising:

a film loading section for loading therewith a spliced film in which a plurality of photographic films are connected in a longitudinal direction thereof;

a reading transport path for guiding the spliced film to a predetermined reading position;

a reading transporting portion for transporting, to the reading position, the spliced film that is supplied to the reading transport path;

an image reading section for reading an image from the spliced film that is transported to the reading position by the reading transporting portion;

a film supplying portion for supplying, to the reading transport path, a head portion of the spliced film loaded with the film loading section;

a joint detecting section for detecting a film joint portion between a first photographic film and a second photographic film in the spliced film supplied to the reading transport path by the film supplying portion, the second photographic film being supplied next to the first photographic film; and

a film separating section for separating the first photographic film from the spliced film on the basis of information from the joint detecting section.

8. An image reading apparatus according to claim 7, wherein

the image reading section comprises a CCD line sensor for reading the image carried by transmission light or reflection light from the spliced film that is located at the reading position, and wherein the joint detecting section detects the film joint portion between the first photographic film and the second photographic film in the spliced film on the basis of an image signal supplied from the CCD line sensor.

9. An image reading apparatus according to claim 7, wherein, with the film loading section, the spliced film that is taken up in roll form in advance is loaded.

10. An image reading apparatus according to claim 7, further comprising:

- a film supply path for guiding the spliced film from the film loading section to the reading transport path;

- a film accepting section for accepting the photographic film that is subjected to the image reading by the image reading means;

- a transport merging portion provided between the film supply path and the reading transport path;

- a film output path connected to the reading transport path via the transport merging portion, for guiding the photographic film from the transport merging portion to the film accepting section;

- a film output portion for outputting, to the film accepting section, the photographic film that is entered the film output

path; and

a transport switching section, which is provided in the transport merging portion, for switching a transport route of the spliced film or the photographic film so that the spliced film that is transported along the film supply path enters the reading transport path, and that the photographic film that is transported from the reading transport path enters the film output path.